

CLAIM LISTING

This listing of claims will replace all prior versions, and listings of claims in the application:

In the Claims:

1. (Currently Amended) A conductive lid adapted to function as a heat sink for an integrated circuit, said conductive lid comprising:

a recessed portion adapted to receive a die of said integrated circuit;

a foot portion extending from the top of said conductive lid to ~~having~~ a surface adapted to be coupled to a substrate of said integrated circuit; and

a through-hole located in said foot portion, said through hole being adapted to receive an adhesive to secure said conductive lid to said substrate of said integrated circuit.

2. (Original) The conductive lid of claim 1 wherein said through-hole comprises a straight through-hole.
3. (Original) The conductive lid of claim 1 wherein said through-hole comprises a tapered through-hole.
4. (Original) The conductive lid of claim 3 wherein said through-hole comprises a multi-diameter through-hole.
5. (Original) The conductive lid of claim 3 wherein said through-hole comprises a first cylindrical portion and a second cylindrical portion.
6. (Original) The conductive lid of claim 1 wherein said through-hole is formed by injection molding.

7. (Original) The conductive lid of claim 1 wherein said through-hole is formed by drilling.
8. (Original) The conductive lid of claim 1 wherein said foot portion extends around said recessed portion.
9. (Original) The conductive lid of claim 8 further comprising a plurality of through-holes positioned in said foot portion.
10. (Original) The conductive lid of claim 9 wherein said plurality of holes are symmetrically spaced around said foot portion.
11. (Currently Amended) An integrated circuit having a heat sink, said integrated circuit comprising:
 - a substrate;
 - a die positioned on said substrate; and
 - a conductive lid positioned over said die and coupled to said substrate, said conductive lid having a foot portion extending from a top of said conductive lid and comprising at least one through-hole.
12. (Original) The integrated circuit of claim 11 wherein said through-hole comprises a straight through-hole.
13. (Original) The integrated circuit of claim 11 wherein said through-hole comprises a tapered through-hole.
14. (Original) The integrated circuit of claim 11 wherein said through-hole comprises a conical through-hole.
15. (Original) The integrated circuit of claim 11 wherein said through-hole comprises a first cylindrical portion and a second cylindrical portion, said first

cylindrical portion having a diameter which is different from said second cylindrical portion.

16. (Original) The integrated circuit of claim 11 further comprising an adhesive material coupling said conductive lid to said substrate.

17. (Original) The integrated circuit of claim 16 wherein said adhesive material comprises a thermally conductive epoxy.

18. (Original) The integrated circuit of claim 16 wherein said adhesive material extends into said through-hole.

19. (Original) The integrated circuit of claim 11 further comprising a thermal grease positioned between said die and said conductive lid.

20. (Original) The integrated circuit of claim 11 further comprising underfill positioned between said substrate and said conductive lid.

21-36. (Cancelled)